CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 78-76

WASTE DISCHARGE REQUIREMENTS FOR:

IT OIL CORPORATION AND
IT ENVIRONMENTAL CORPORATION
VINE HILL AND BAKER
CLASS I DISPOSAL SITES
MARTINEZ, CONTRA COSTA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. The Regional Board adopted Waste Discharge Requirements Order No. 71-56, on July 22, 1971 on, Industrial Tank, Inc. and its subsidiary San Pablo Oil Recovery Company (now known as IT Environmental Corporation and IT Oil Corporation respectively) for their Class I Disposal Site near Vine Hill in Contra Costa County. On August 26, 1971, the Board adopted requirements on Industrial Tank, Inc. for its Class I disposal site known as the Baker site, also in Contra Costa County. Both IT Oil Corporation and IT Environmental Corporation will hereinafter be jointly known as the discharger, and this Order applies to both the Vine Hill and Baker sites.

2. The discharger currently disposes Group 1 wastes on two Class-I sites which it owns. The Vine Hill and Baker sites are located approximately one quarter mile apart in low lieing area east of the City of Martinez in Contra Costa County. The Vine Hill site is located east of Interstate 680 at the end of Arthur Road. The Baker site is located directly south of the confluence of Pacheco and Walnut Creek Flood Control Channels. The locations of the sites are shown on Attachment A, which is incorporated herein and made a part of this Order.

3. The Vine Hill site covers approximately 21 acres on which the industrial waste treatment facilities, several retention ponds and the IT Oil Corporation facilities are located. The site is underlain by a considerable thickness of impermeable silty clay deposits with discontinuous peat and sand lenses. Limited amounts of very low quality groundwater exists within three to five feet of the ground surface. There is no known useable groundwater immediately under the site.

4. The Baker site is a 130 acre site which currently has a total of five ponds used for waste evaporation, biodegradation of industrial solid wastes, and contaminated storm runoff storage as shown on Attachment A. The site is underlain by one to four feet of baymud fill (silty, clayey sands) underlain by several feet of low permeability silty and sandy clays with thin organic peat lenses. Poor quality groundwater exists at shallow depths. No known useable groundwater exists immediately below site.

5. The discharger handles approximately 68 million gallons per year of liquid wastes received mainly from petroleum refineries, and steel, chemical and semi-conductor industries. All liquid wastes are received at the Vine Hill site where they are subjected to one or more treatment process such as neutralization, solvent recovery, oil recovery, cynide destruction, denitrification or incineration. Treated wastes are pumped to the Baker site ponds in the form of dilute aqueous solutions for solar evaporation, or treated industrial wastewater solids for biodegradation.

6. These landfill sites, subsequent to modifications required to comply with this Order, will meet the criteria contained in the California Administrative Code, Title 23, Chapter 3, Subchapter 15, for classification as a Class I disposal site suitable to receive Group 1, Group 2, and Group 3 wastes.

7. The beneficial uses of Walnut Creek and Pacheco Creek which could be affected by this disposal site are:

   a) Recreation
   b) Fish migration habitat
   c) Habitat and resting area for waterfoul and migratory birds
   d) Industrial Water supply
   e) Esthetic enjoyment
   f) Navigation

8. Land within 1000 feet of these sites is used for residences, pasture, refuse disposal, industrial and transportation uses.

9. The Board adopted a Water Quality Control Plan for the San Francisco Bay Basin, in April 1975, and this Order implements the water quality objectives stated in that plan.

10. This order authorizes the continued operation of two privately owned Class I solid waste disposal sites. The Order will not have a significant effect on the environment pursuant to the California Environmental Quality Control Act and is exempt as provided in Section 15101, Title 14, California Administrative Code.

11. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

12. The Board, in a public meeting heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that IT Environmental Corporation and IT Oil Corporation and IT Oil Corporation or any other persons that shall own the land or operate this disposal site shall comply with the following for the Vine Hill and Baker Sites:

A. Prohibition

The discharge of any waste or polluted runoff from the disposal areas to the surface waters or groundwaters of the State is prohibited.

B. Waste Disposal Specifications

1. The treatment or disposal of wastes shall not create a nuisance as defined in Section 13050 (m) of the California Water Code.

2. Waste materials shall be confined to the disposal sites as shown on Attachment A at all times and shall not be placed in any position where they can be carried from the disposal sites and discharged into waters of the State.

3. A minimum of two feet of freeboard shall be maintained in all ponds throughout the year.

4. Any water which has contacted waste material shall be contained in the designated disposal sites as shown on Attachment A, unless other disposition is approved by the Board.

5. The discharger shall remove and relocate any wastes which are discharged at this site in violation of these requirements.

C. Leachate and Drainage Specifications

1. The disposal area shall be protected at all times from any washout or erosion of wastes or from any threat of inundation.

2. Leachate or seepage volumes contained by liquid control barriers or subdrains shall be maintained below a volume equal to 75 percent of the total storage capacity of the barrier or subdrain.

3. The exterior faces of disposal area barriers shall be protected from erosion or from actions of rodents to maintain the effectiveness of the barrier.

4. Vertical or lateral movement of wastes or leachate from the disposal areas as shown on Attachment A shall be prevented by an impermeable dike or barrier surrounding these areas. This dike shall be keyed into impermeable natural substrata and shall provide a minimum of five feet of material with a permeability not to exceed 1×10^{-8} cm/sec or equivalent.

5. The following group 1 wastes shall not be disposed at the disposal areas except upon approval of the Regional Board's Executive Officer.

   a. Pesticides, Herbicides or defoliants

   b. Poly-chlorinated-biphenols

6. Useable groundwaters shall not be degraded as a result of disposal operation.

D. Provisions

1. The discharger shall comply with all sections of this Order except C.1 and C.4, immediately upon its adoption.

2. The discharger shall submit a report by December 1, 1978 which presents engineering data and analysis assuring that the existing facilities are meeting or are capable of meeting specifications C.1 and C.4. of compliance. If compliance is not currently being achieved, plans shall be submitted by January 30, 1979 for achieving compliance. In any case, specifications C.1, and C.4 shall be complied with no later than November 1, 1979. All reports and plans described above shall be prepared by a registered civil engineer or a certified engineer geologist.

3. The discharger shall file with this Regional Board a report describing the maximum capacity of the two disposal sites for handling wastes, based on the solar evaporation rate, including the treatment of the group 1 wastes. This report shall be submitted no later than December 1, 1978.

4. The discharger shall file a written report within 90 days after the total quantity of wastes discharged at this site equals 75 percent of the reported capacity of the site. The report shall contain a schedule for studies, design and other steps needed to provide additional capacity, or the total quantity discharged shall be limited to the reported capacity.

5. The discharger shall maintain a copy of the Order at the sites or office so as to be available at all times to site operating personnel.

6. The discharger shall file with this Board a report of any material change or proposed change in the character, location or quantity of this waste discharge. For the purpose of these requirements, this includes any proposed change in the boundaries, contours or ownership of the disposal areas.

7. The discharger shall file with the Board technical reports on self-monitoring work performed according to the detailed specifications contained in the existing Monitoring and Reporting Program which has been directed by the Executive Officer.

8. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the discharger, the discharger shall notify the succeeding owner or operator of the existence of this Order by a letter, a copy of which shall be forwarded to this Board.

9. This Board considers the property owner to have a continuing responsibility for correcting any problem which may arise in the future as a result of this waste discharge during subsequent use of the land for other purposes.

10. In the event of any incident whereby the discharger is unable to comply with any of the conditions of this Order, the discharger shall notify the Executive Officer by telephone as soon as he or his agents have knowledge of the incident. A written report shall be filed within one week of the telephone notification. The written report shall include pertinent information explaining reasons for the non-compliance and shall indicate what steps were taken to correct the problem and the dates thereof, and what steps are being taken to prevent the problem from recurring.

11. Six (6) months prior to discontinuing the use of either site for waste disposal the discharger shall submit a technical report to the Board describing the methods and controls to be used to assure protection of the quality of surface (and groundwaters) of the area during final operations and with any proposed subsequent use of the land. This report shall be prepared by or under the supervision of a registered engineer or a certified engineering geologist. The method used to close the site and maintain protection of the quality of surface (and groundwater) shall comply with waste discharge requirements established by the regional board.

12. The discharger shall permit the Regional Board:

    (a) Entry upon premises on which waste ponds are located or in which any required records are kept,

    (b) Access to copy any records required to be kept under terms and conditions of this order,

    (c) Inspection of monitoring equipment or records, and

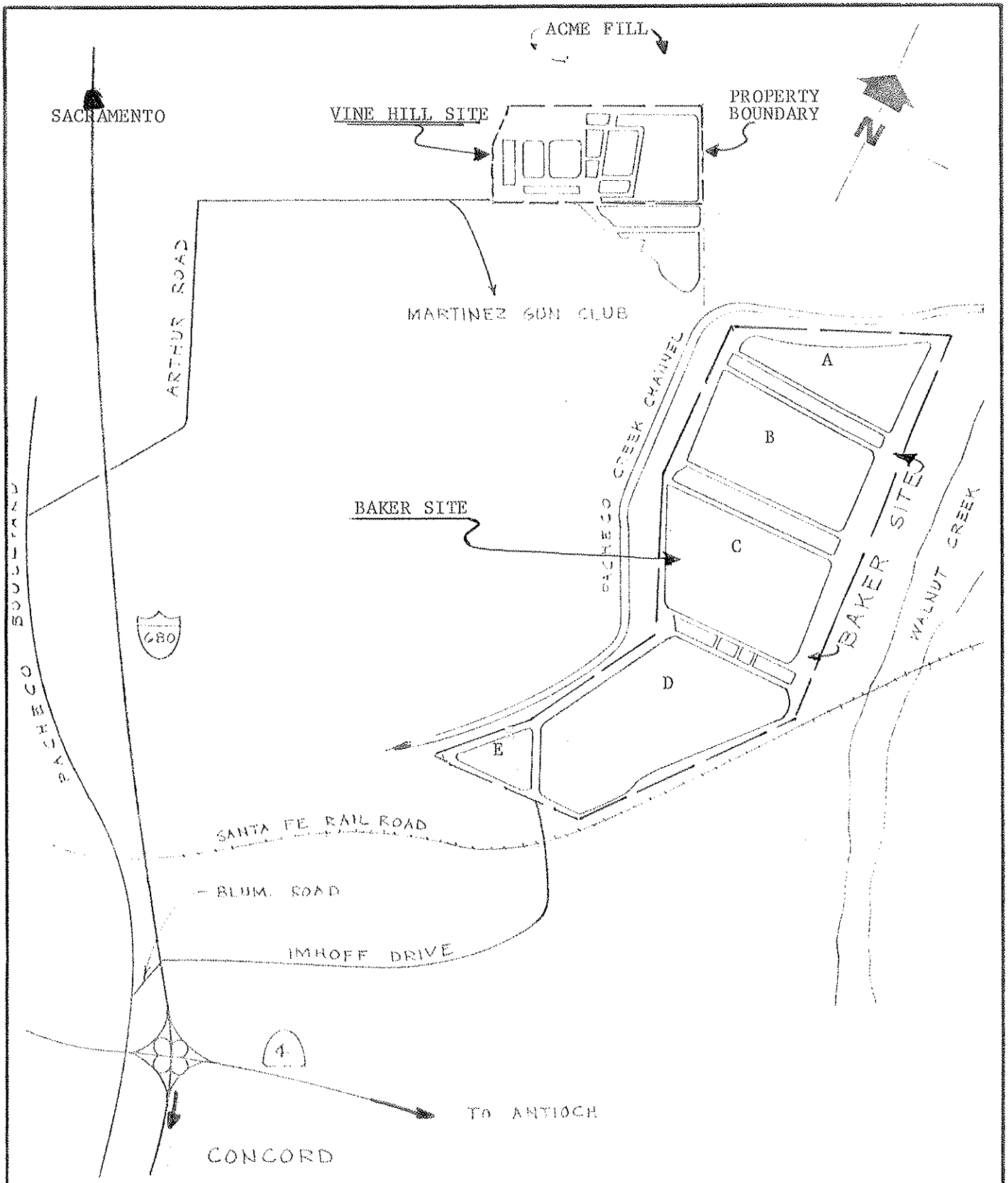
    (d) Sampling of any discharge.

13. This Board's Waste Discharge Requirements Resolution #417, Order Nos. 71-56, 71-60 and 71-59 are hereby rescinded.

I Fred H. Dierker, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on September 19, 1978.

FRED H. DIERKER
Executive Officer

Attachment
Map A



LEGEND

PROPERTY BOUNDARY

EVAPORATION & STORAGE-
& BIODEGRATION PONDS

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

I. T. ENVIRONMENTAL CORPORATION & IT OIL CORPORATION

LOCATION OF CLASS I DISPOSAL SITE
MARTINEZ, CONTRA COSTA COUNTY
ATTACHMENT A ORDER NO: 78-77

DRAWN BY:	DATE:	DRWG. NO.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

IT CORPORATION
BAKER AND VINE HILL FACILITIES
MARTINEZ
CONTRA COSTA COUNTY

ORDER NO. 78-76

CONSISTS OF

PART A

AND

PART B

PART A

A. General

1. Reporting responsibilities of waste dischargers are specified in Sections 13225 (a), 13267 (b), 13383, and 13387 (b) of the California Water Code and this Regional Board's Resolution No. 73-16.

2. The principal purposes of a self-monitoring program by a waste discharger are the following:

   a. To document compliance with waste discharge requirements and prohibitions established by the Board;

   b. To facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge;

   c. To develop or assist in the development of effluent standards of performance, pretreatment and toxicity standards, and other standards; and,

   d. To prepare water and wastewater quality inventories.

B. Sampling and Analytical Methods

1. Sample collection, storage, and analyses shall be performed according to the most recent version of Standard Methods for the Analysis of Wastewater, and Test Methods for Evaluating Solid Waste EPA Document SW-846, or other EPA approved methods and in accordance with an approved sampling and analysis plan.

2. Water and waste analysis shall be performed by a laboratory approved for these analyses by the State Department of Health. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to this Regional Board.

3. All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. Definition of Terms

1. A grab sample is a representative discrete sample collected at any time.

2. Duly authorized representative is either a named individual or any individual occupying a named position such as the following:

   a. Authorization is made in writing by a principal executive officer; or,

   b. Authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as general partner in a partnership, sole proprietorship, the position of plant manager, operator of a well or a well field, superintendent, position of equivalent

responsibility, or an individual or position having overall responsibility for environmental matters for the company.

D. Schedule of Sampling, Analysis, and Observations

1. The discharger is required to perform sampling, analysis, and observations according to the schedule specified in Part B, and the requirements in Chapter 15.

2. A statistical analysis shall be performed and reported annually as described in the current revision of Chapter 15.

E. Records to be Maintained by the Discharger

1. Written reports shall be maintained by the discharger for ground water monitoring and wastewater sampling, and shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Board. Such records shall show the following for each sample:

   a. Identity of sample and sample station number;
   b. Date and time of sampling;
   c. Date and time that analyses are started and completed, and the name of the personnel performing the analyses;
   d. Complete procedure used, including the method of preserving the sample, and the identity and volumes of reagents used. A reference to a specific section of a reference required in Part A Section B is satisfactory.
   e. Calculation of results;
   f. Results of analyses, and detection limits for each analyses; and,
   g. Chain of custody forms for each sample.

F. Reports to be Filed with the Board

1. The report period shall be done on a calendar quarterly basis. For quarterly ground water monitoring reports, written reports shall be filed regularly each quarter within forty-five days from the end of the quarter monitored. In addition an annual report shall be filed as indicated in F.1.g.3. The reports shall include the following:

   a. Letter of Transmittal - A letter transmitting the essential points in each self-monitoring report should accompany each report. Such a letter shall include a discussion of any requirement violations found during the last report period, and actions taken or planned for correcting the violations, such as, operation and/or facilities modifications. If the discharger has previously submitted a detailed time schedule for correcting requirements violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred in the last report period this shall be stated in the letter of transmittal. Monitoring reports and the letter transmitting the monitoring reports shall be signed by a principal executive officer at the level of vice president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates. The letter shall contain a statement of the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct. The letter shall contain the following certification:

"I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible of gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

b. Summary Sheet - Each monitoring report shall include a compliance evaluation summary sheet. Until the Order's amended to specify ground water protection standards, the following shall apply and the compliance sheet shall contain:

(1) The method and time of water level measurement; the type of pump used for purging, pump placement in the well, method of purging, pumping rate; equipment and methods used to monitor field pH, temperature, turbidity, and conductivity during purging; calibration of the field equipment, results of the pH, temperature, turbidity, and conductivity testing; well recovery time, and method of disposing of the purge water; and,

(2) Type of pump used, pump placement for sampling, a detailed description of the sampling procedure; number and description of equipment, field and travel blanks; number and description of duplicate samples; type of sample containers and preservatives used, the date and time of sampling, the name and qualifications of the person actually taking the samples, and any other observations; and, the chain of custody record.

c. A summary of the status of any remediation work performed during that quarter. This shall be a brief and concise summary of the work initiated and completed as follows:

(1) As interim corrective action measures; and,

(2) To define the extent and rate of migrations of waste constituents in the soil and ground water at the site.

d. The discharger shall describe, in the quarterly report, the reasons for significant increases in a pollutant concentration at a ground water monitoring well. The description shall include the following:

(1) The source of the increase;

(2) How the discharger determined or will investigate the source of the increase; and,

(3) What source removal measures have been completed or will be proposed.

e. On a quarterly basis, it is required that self-monitoring report shall contain but not necessarily be limited to the following:

- o Monitoring data regarding depth to water from top of the casing, as well as piezometric elevation referenced to Mean Sea Level in each well;
- o A map or aerial photograph showing observation and monitoring station locations, and groundwater levels contour (for each water bearing zone); and,
- o A map or aerial photograph showing observation and monitoring station locations, and plume contours (if any) for each chemical in each aquifer.

If different water-bearing zones exists, monitoring data for each zone shall be reported separately. Data from groundwater monitoring wells shall be presented in numerical order. In addition the data shall be grouped by waste management units and subdivided by up gradient and down gradient.

f. Laboratory statements of results of analyses specified in Part B must be included in each report. The director of the laboratory whose name appears on the laboratory certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Board. The following information shall be provided:

(1) The methods of analyses and detection limits must be appropriate for the expected concentrations. Specific methods of analyses must be identified. If methods other than EPA approved methods or Standard Methods are used, the exact methodology must be submitted for review; and,

(2) In addition to the results of the analyses, laboratory quality control/quality assurance (QA/QC) information must be included in the monitoring report. The laboratory QA/QC information should include the method, equipment and analytical detection limits; the recovery rates; an explanation for any recovery rate that is less than 90%; the results of equipment and method blanks; the results of spiked and surrogate samples; the frequency of quality control analysis; and the name and qualifications of the person(s) performing the analyses.

g. By March 1 of each year the discharger shall submit an Annual Report to the Board covering the previous calendar year. This report shall contain:

(1) Tabular and graphical summaries of the monitoring data obtained during the previous year;

(2) A comprehensive discussion of the compliance record, and the

corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements; and,

(3) A written summary of the ground water analyses indicating any change in the quality of the ground water.

2. In the event the discharger violates of threatens to violate the conditions of the waste discharge requirements and prohibitions or intends to experience a plant bypass or treatment unit bypass due to:

a. Maintenance work, power failures, or breakdown of waste treatment equipment, or;
b. Accidents caused by human error or negligence, or;
c. Other causes, such as acts of nature.

The discharger shall notify the Regional Board office by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within 7 working days of the telephone notification. The written report shall include time and date, duration and estimated volume of waste bypassed, method used in estimating volume and person notified of the incident. The report shall include pertinent information explaining reasons for the noncompliance and shall indicate what steps were taken to prevent the problem from recurring.

In addition, the waste discharger shall promptly accelerate his monitoring program to analyze the discharge at least once every day. Such daily analyses shall continue until such time as the effluent limits have been attained, until bypassing stops or until such time as the Executive Officer determines to be appropriate. The results of such monitoring shall be included in the regular Quarterly Report.